

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

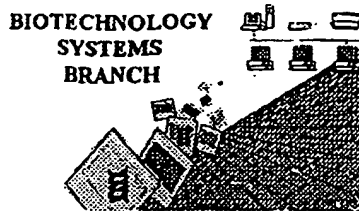
- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/750,939  
Source: FEWO  
Date Processed by STIC: 7/14/04

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: <u>10750, 939</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <u>    </u> Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <u>    </u> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <u>    </u> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <u>    </u> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <u>    </u> Variable Length	Sequence(s) <u>        </u> contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <u>    </u> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <u>        </u> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <u>    </u> Skipped Sequences (OLD RULES)	Sequence(s) <u>        </u> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <u>    </u> Skipped Sequences (NEW RULES)	Sequence(s) <u>        </u> missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <u>    </u> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <u>    </u> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <u>    </u> Use of <220>	Sequence(s) <u>1-9, 12-15, 17-20</u> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 0001/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <u>    </u> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <u>    </u> Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid	



I hereby Certify that this Correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Missing Parts, Assistant Commissioner for Patents P.O. Box 1450, Alexandria, VA 22313-1450 on March 24, 2004.

Michael Culotta

Name

*Michael Culotta*

Signature

March 24, 2004

Date of Signature

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: The Research Foundation of the State of New York

U.S. Application No.: 10/750,939

Filed: January 2, 2004

For: Novel Inhibitors of Poxvirus Replication

**LETTER**

Mail Stop Missing Parts

Assistant Commissioner for Patents

P.O. Box 1450

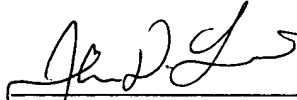
Alexandria, VA 22313-1450

Sir:

In response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acids Sequence Disclosures mailed March 17, 2004, please find herewith a corrected sequence listing in Paper Copy and Computer Readable Form. Applicant declares that the Paper Copy of the Sequence Listing and the Computer Readable Copy enclosed herewith are the same and no new matter has been added. Please enter the paper copy.

The Computer Readable copy enclosed herein has been checked with Checker version 3.1 software.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "John D. Lopinski", written over a horizontal line.

John D. Lopinski  
Reg. No. 50,486

Hodgson Russ LLP  
One M&T Plaza, Suite 2000  
Buffalo, NY 14203-2391  
(716) 848-1628  
Dated: March 24, 2004

BFLODOCS 910292v1 (JSDW011.DOC)



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/750,939

DATE: 01/14/2004

TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

3 <110> APPLICANT: Niles, Edward  
 5 <120> TITLE OF INVENTION: Novel Inhibitors of Poxvirus Replication  
 7 <130> FILE REFERENCE: 11520.0333  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/750,939  
 10 <141> CURRENT FILING DATE: 2004-01-02  
 12 <150> PRIOR APPLICATION NUMBER: US/60/437,945  
 13 <151> PRIOR FILING DATE: 2003-01-02  
 15 <160> NUMBER OF SEQ ID NOS: 20  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 7  
 19 <212> TYPE: RNA  
 20 <213> ORGANISM: Artificial Sequence  
 22 <220> FEATURE:  
 23 <221> NAME/KEY: unsure  
 24 <222> LOCATION: 6  
 25 <223> OTHER INFORMATION: n is g,a,u or c  
 27 <400> SEQUENCE: 1  
 W--> 28 uuuuuuu 7  
 30 <210> SEQ ID NO: 2  
 31 <211> LENGTH: 7  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: artificial sequence  
 35 <220> FEATURE:  
 36 <223> OTHER INFORMATION:  
 W--> 38 <400> 2  
 39 ttttttt 7  
 42 <210> SEQ ID NO: 3  
 43 <211> LENGTH: 22  
 44 <212> TYPE: RNA  
 45 <213> ORGANISM: artificial sequence  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: unsure  
 49 <222> LOCATION: 14  
 50 <223> OTHER INFORMATION: n is g,a,u or c  
 52 <400> SEQUENCE: 3  
 W--> 53 gggccggcuu uuuuuuugcg uu 22  
 56 <210> SEQ ID NO: 4  
 57 <211> LENGTH: 22  
 58 <212> TYPE: RNA  
 59 <213> ORGANISM: artificial sequence  
 61 <220> FEATURE:  
 62 <223> OTHER INFORMATION:  
 W--> 64 <400> 4

Does Not Comply  
Corrected Diskette Needed

Please explain, see item # 11 on error summary sheet.

Per New Sequence Rules, if <213> Response is Artificial Sequence/Unknown please explain in section <220> - <223> please see item # 11 on error summary sheet.

please explain

same error

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/750,939

DATE: 01/14/2004  
TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

65 gggccgcaaa uuauuugcg uu 22

68 <210> SEQ ID NO: 5

69 <211> LENGTH: 36

70 <212> TYPE: RNA

71 <213> ORGANISM: artificial sequence

73 <220> FEATURE:

74 <221> NAME/KEY: unsure

75 <222> LOCATION: 23

76 <223> OTHER INFORMATION: n is g,a,u or c

78 <400> SEQUENCE: 5

W--> 79 gggcgaaug ggcggcuuu uuuuugcg ugaauu 36

82 <210> SEQ ID NO: 6

83 <211> LENGTH: 36

84 <212> TYPE: RNA

85 <213> ORGANISM: artificial sequence

87 <220> FEATURE:

W--> 88 <221> NAME/KEY:

89 <222> LOCATION:

90 <223> OTHER INFORMATION: uracils at 8,9,18-26, 30, 31, 35 and 36 are brominated

92 <400> SEQUENCE: 6

93 gggcgaaug ggcggcuuu uuuuugcg ugaauu 36

95 <210> SEQ ID NO: 7

96 <211> LENGTH: 27

97 <212> TYPE: DNA

98 <213> ORGANISM: artificial sequence

100 <220> FEATURE:

101 <223> OTHER INFORMATION:

W--> 103 <400> 7

104 aattgggccc gctttttttt tgcgttg 27

107 <210> SEQ ID NO: 8

108 <211> LENGTH: 22

109 <212> TYPE: DNA

110 <213> ORGANISM: artificial sequence

112 <220> FEATURE:

W--> 113 <221> NAME/KEY:

114 <222> LOCATION:

115 <223> OTHER INFORMATION: 9-17 is deoxyuracil

117 <400> SEQUENCE: 8

118 gggccggcuu uuuuuugcg uu 22

121 <210> SEQ ID NO: 9

122 <211> LENGTH: 22

123 <212> TYPE: RNA

124 <213> ORGANISM: artificial sequence

126 <220> FEATURE:

W--> 127 <221> NAME/KEY:

128 <222> LOCATION:

129 <223> OTHER INFORMATION: 19-17 is brominated deoxyuracil

131 <400> SEQUENCE: 9

132 gggccggcuu uuuuuugcg uu 22

please explain, same error

same error

same error

same error

same error

## RAW SEQUENCE LISTING

DATE: 01/14/2004

PATENT APPLICATION: US/10/750,939

TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

134 <210> SEQ ID NO: 10  
135 <211> LENGTH: 22  
136 <212> TYPE: DNA  
137 <213> ORGANISM: artificial sequence  
139 <220> FEATURE:  
W--> 140 <221> NAME/KEY:  
141 <222> LOCATION:  
142 <223> OTHER INFORMATION: T5NT  
144 <400> SEQUENCE: 10  
145 gggccggcgtt tttttttgcg uu 22  
148 <210> SEQ ID NO: 11  
149 <211> LENGTH: 22  
150 <212> TYPE: DNA  
151 <213> ORGANISM: artificial sequence  
153 <220> FEATURE:  
W--> 154 <221> NAME/KEY:  
155 <222> LOCATION:  
156 <223> OTHER INFORMATION: mutant T5NT  
158 <400> SEQUENCE: 11  
159 gggccggcaa ttattatgcg tt 22  
161 <210> SEQ ID NO: 12  
162 <211> LENGTH: 17  
163 <212> TYPE: RNA  
164 <213> ORGANISM: artificial sequence - same error  
166 <220> FEATURE:  
167 <221> NAME/KEY: unsure  
168 <222> LOCATION: 10  
169 <223> OTHER INFORMATION: n is a,g,u or c  
171 <400> SEQUENCE: 12  
W--> 172 cggcuuuuuu uuugcgu 17  
174 <210> SEQ ID NO: 13  
175 <211> LENGTH: 13  
176 <212> TYPE: RNA  
177 <213> ORGANISM: artificial sequence - same error  
179 <220> FEATURE:  
180 <221> NAME/KEY: unsure  
181 <222> LOCATION: 8  
182 <223> OTHER INFORMATION: n is a,g, u or c  
184 <400> SEQUENCE: 13  
W--> 185 gcuuuuuuuu ugc 13  
188 <210> SEQ ID NO: 14  
189 <211> LENGTH: 9  
190 <212> TYPE: RNA  
191 <213> ORGANISM: artificial sequence - same error  
193 <220> FEATURE:  
194 <221> NAME/KEY: unsure  
195 <222> LOCATION: 7 - there is a "u" at this location.  
196 <223> OTHER INFORMATION: n is a,g,u or c  
198 <400> SEQUENCE: 14



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/750,939

DATE: 01/14/2004

TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

W--&gt; 199 uuuuuuuu 9

202 &lt;210&gt; SEQ ID NO: 15

203 &lt;211&gt; LENGTH: 7

204 &lt;212&gt; TYPE: RNA

205 &lt;213&gt; ORGANISM: artificial sequence

207 &lt;220&gt; FEATURE:

208 &lt;221&gt; NAME/KEY: unsure

209 &lt;222&gt; LOCATION: 6

210 &lt;223&gt; OTHER INFORMATION: n is a,g,u or c

212 &lt;400&gt; SEQUENCE: 15

W--&gt; 213 uuuuuuuu 7

216 &lt;210&gt; SEQ ID NO: 16

217 &lt;211&gt; LENGTH: 7

218 &lt;212&gt; TYPE: RNA

219 &lt;213&gt; ORGANISM: artificial sequence

221 &lt;220&gt; FEATURE:

W--&gt; 222 &lt;221&gt; NAME/KEY:

223 &lt;222&gt; LOCATION:

224 &lt;223&gt; OTHER INFORMATION: mutant 7-mer

226 &lt;400&gt; SEQUENCE: 16

227 uuuuuuuu 7

229 &lt;210&gt; SEQ ID NO: 17

230 &lt;211&gt; LENGTH: 22

231 &lt;212&gt; TYPE: DNA

232 &lt;213&gt; ORGANISM: artificial sequence

234 &lt;220&gt; FEATURE:

235 &lt;221&gt; NAME/KEY: unsure

236 &lt;222&gt; LOCATION: 14

237 &lt;223&gt; OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are DNA

239 &lt;400&gt; SEQUENCE: 17

W--&gt; 240 gggccggcuu uuuuuuugcg uu 22

242 &lt;210&gt; SEQ ID NO: 18

243 &lt;211&gt; LENGTH: 22

244 &lt;212&gt; TYPE: RNA

245 &lt;213&gt; ORGANISM: artificial sequence

247 &lt;220&gt; FEATURE:

248 &lt;221&gt; NAME/KEY: unsure

249 &lt;222&gt; LOCATION: 14

250 &lt;223&gt; OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are 2'O methylated; 1-8 and 17-22 have phosphorthiol bonds

252 &lt;400&gt; SEQUENCE: 18

W--&gt; 253 gggccggcuu uuuuuuugcg uu 22

255 &lt;210&gt; SEQ ID NO: 19

256 &lt;211&gt; LENGTH: 22

257 &lt;212&gt; TYPE: DNA

258 &lt;213&gt; ORGANISM: artificial sequence

260 &lt;220&gt; FEATURE:

261 &lt;221&gt; NAME/KEY: unsure

262 &lt;222&gt; LOCATION: 14

263 &lt;223&gt; OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are phosphorthiols; 9-17 are

RNA

15-17?

-same error

-same error

FYI: u's are at  
locations 21 and 22

-same error

-same error

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/750,939

DATE: 01/14/2004

TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

265 <400> SEQUENCE: 19  
W--> 266 gggccggcuu uuuuuuugcg uu 22

268 <210> SEQ ID NO: 20

269 <211> LENGTH: 7

270 <212> TYPE: RNA

271 <213> ORGANISM: artificial sequence

273 <220> FEATURE:

274 <223> OTHER INFORMATION:

W--> 276 <400> 20  
277 uuuuuau 7

*same error*

RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 01/14/2004

PATENT APPLICATION: US/10/750,939

TIME: 11:00:19

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 6 ✓  
 Seq#:3; N Pos. 14 ✓  
 Seq#:5; N Pos. 23 ✓  
 Seq#:12; N Pos. 10 ✓  
 Seq#:13; N Pos. 8 ✓  
 Seq#:14; N Pos. 6 ✓  
 Seq#:15; N Pos. 6 ✓  
 Seq#:17; N Pos. 14 ✓  
 Seq#:18; N Pos. 14 ✓  
 Seq#:19; N Pos. 14 ✓

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:18; Line(s) 250

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/750,939

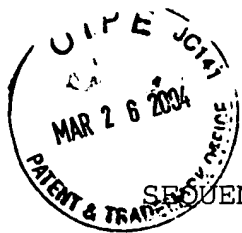
DATE: 01/14/2004

TIME: 11:00:19

Input Set : A:\niles non-provisional-US.txt

Output Set: N:\CRF4\01142004\J750939.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number  
L:28 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:38 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:36  
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:64 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:62  
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:88 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6  
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:101  
L:113 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8  
L:127 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9  
L:140 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10  
L:154 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11  
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:222 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16  
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:276 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:274



niles non-provisional-US.txt

SEQUENCE LISTING

<110> Niles, Edward

<120> Novel Inhibitors of Poxvirus Replication

<130> 11520.0333

<140> US 10/750,939

<141> 2004-01-02

<150> US/60/437,945

<151> 2003-01-02

<160> 20

<210> 1

<211> 7

<212> RNA

<213> Artificial Sequence

<220>

<221> unsure

<222> 6

<223> pox virus; n is g,a,u or c

<400> 1

uuuuunu 7

<210> 2

<211> 7

<212> DNA

<213> artificial sequence

<220>

<223> nascent pox virus termination signal

<400> 2

ttttttt 7

<210> 3

<211> 22

<212> RNA

<213> artificial sequence

<220>

<221> unsure

niles non-provisional-US.txt

<222> 14

<223> U5NU-22-mer oligo; n is g,a,u or c

<400> 3

gggccggcuu uuunuuugcg uu 22

<210> 4

<211> 22

<212> RNA

<213> artificial sequence

<220>

<223> mutant- 22-mer oligo

<400> 4

gggccggcaa uuauaugcg uu 22

<210> 5

<211> 36

<212> RNA

<213> artificial sequence

<220>

<221> unsure

<222> 23

<223> pGEM-U5NU-36-mer oligo n is g,a,u or c

<400> 5

gggcgaauug ggccggcuuu uuunuuugcgu ugaauu 36

<210> 6

<211> 36

<212> RNA

<213> artificial sequence

<220>

<221>

<222>

<223> pGEM-Br-U5NU-36-mer; uracils at 8,9,18-26, 30, 31, 35 and 36 are brominated

<400> 6

gggcgaauug ggccggcuuu uuuuuugcgu ugaauu 36

<210> 7

niles non-provisional-US.txt

<211> 27

<212> DNA

<213> artificial sequence

<220>

<223> transcription template plasmid oilgo

<400> 7

aattgggccg gctttttttt tgcgttg 27

<210> 8

<211> 22

<212> DNA

<213> artificial sequence

<220>

<221>

<222>

<223> dU5NdU oligo; 9-17 is deoxyuracil

<400> 8

gggccggcgu uuuuuuugcg uu 22

<210> 9

<211> 22

<212> RNA

<213> artificial sequence

<220>

<221>

<222>

<223> BrdU5NdU oligo; 19-17 is brominated deoxyuracil

<400> 9

gggccggcgu uuuuuuugcg uu 22

<210> 10

<211> 22

<212> DNA

<213> artificial sequence

<220>

<221>

<222>

<223> T5NT

niles non-provisional-US.txt

<400> 10  
gggccggcctt tttttttgcg uu 22

<210> 11  
<211> 22  
<212> DNA  
<213> artificial sequence

<220>  
<221>  
<222>  
<223> mutant T5NT

<400> 11  
gggccggcaa ttattatgcg tt 22

<210> 12  
<211> 17  
<212> RNA  
<213> artificial sequence

<220>  
<221> unsure  
<222> 10  
<223> U5NU 17-mer oligo; n is a,g,u or c

<400> 12  
cggcuuuuun uuugcgu 17

<210> 13  
<211> 13  
<212> RNA  
<213> artificial sequence

<220>  
<221> unsure  
<222> 8  
<223> U5NU-13-mer oligo; n is a,g, u or c

<400> 13  
gcuuuuunuu ugc 13

<210> 14  
<211> 9  
<212> RNA  
<213> artificial sequence



niles non-provisional-US.txt

<220>

<221> unsure

<222> 7

<223> U5NU-9-mer oligo; n is a,g,u or c

<400> 14

uuuuuuuuu 9

<210> 15

<211> 7

<212> RNA

<213> artificial sequence

<220>

<221> unsure

<222> 6

<223> U5NU-7-mer oligo; n is a,g,u or c

<400> 15

uuuuunu 7

<210> 16

<211> 7

<212> RNA

<213> artificial sequence

<220>

<221>

<222>

<223> mutant 7-mer

<400> 16

uuuuuau 7

<210> 17

<211> 22

<212> DNA

<213> artificial sequence

<220>

<221> unsure

<222> 14

<223> DNA-U9-DNA oligo; n is g,a,u or c; 1-8 and 18-22 are DNA

<400> 17

niles non-provisional-US.txt

gggccggcguu uuunuuugcg uu 22

<210> 18

<211> 22

<212> RNA

<213> artificial sequence

<220>

<221> unsure

<222> 14

<223> 2-prime-O-Me-RNA-PT-U9-2-prime-O-Me-PT-RNA oligo; n is g,a,u or c; 1-8

and 18-22 are 2-prime-O methylated; 1-8 and 17-22 have phosphorothiol bonds

<400> 18

gggccggcguu uuunuuugcg uu 22

<210> 19

<211> 22

<212> DNA

<213> artificial sequence

<220>

<221> unsure

<222> 14

<223> PT-DNA-U9-PT-DNA oligo; n is g,a,u or c; 1-8 and 18-22 are phosphorothiol; 9-17 are RNA

<400> 19

gggccggcguu uuunuuugcg uu 22

<210> 20

<211> 7

<212> RNA

<213> artificial sequence

<220>

<223> U5AU oligo

<400> 20

uuuuauu 7